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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,051	07/15/2003	Ching-Shih Chen	JCLA10863	8843

7590
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06/30/2004

EXAMINER

FIGUEROA, FELIX O

ART UNIT	PAPER NUMBER
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2833

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/621,051	Applicant(s) CHEN ET AL.	
	Examiner Felix O. Figueroa	Art Unit 2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

The drawings are objected to because they have elements shown in cross section which are not properly crosshatched. Insulating members shown in cross section should be properly crosshatched. See for example Figures 1 and 2. It is brought to applicant's attention that the conventional crosshatch for insulating members shown in cross section consist of lines of two different thicknesses alternatively disposed.



Correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Kuo et al. (US 6,462,954).

Kuo discloses a self-alignment structure comprising: a base plate (18) having at least a threaded hole (181) therein; and at least a sectional bolt (15) having a rod body (151) with one end of the rod body attached to a threaded section (not labeled) and the

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other end of the rod body attached to a cap piece (153) of the sectional bolt, wherein the rod body has a diameter greater than the threaded section, and the threaded section of the sectional bolt passes through the circuit board (2) and screws into the threaded hole in the base plate such that the bottom surface of the rod body is in contact with the surface of the base plate and the bottom surface of the cap piece faces the circuit board, wherein the rod body has a length larger than a thickness of the circuit board (see Fig.4).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo et al. in view of West et al. (US 4,602,125).

Kuo discloses substantially the claimed invention except for the elastic body. West teaches the use of an elastic body (10) incorporated to a circuit board (12), thus reducing strain and wearing of the circuit board. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the circuit board of Kuo with an elastic body on the circuit board, as taught by West, to reduce strain and wearing of the circuit board.

Regarding claims 3-7 and 9-12, West discloses the elastic body being a spring washer, rubber washer (col.3 line 67), compression spring, with a spacer / outer groove ring (14,15).

Regarding claims 8 and 13, West discloses the elastic body being made from silicone (col.3 line 67).

Claims 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (APA) in view of Kuo et al.

Applicant's APA discloses substantially the claimed invention except for the specific sectional bolt. Kuo discloses a sectional bolt (15) having a rod body (151) with one end of the rod body attached to a threaded section (not labeled) and the other end of the rod body attached to a cap piece (153) of the sectional bolt, wherein the rod body has a diameter greater than the threaded section, and the threaded section of the sectional bolt passes through the circuit board (2) and screws into the threaded hole in the base plate such that the bottom surface of the rod body is in contact with the surface of the base plate and the bottom surface of the cap piece faces the circuit board, wherein the rod body has a length larger than a thickness of the circuit board (see Fig.4) to provide automatic correction of the travel / position of the contact(col.1 lines 50-53). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the APA with a sectional bolt, as taught by Kuo, to provide automatic correction of contact travel / position.

Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's APA and Kuo et al. in view of West et al.

Applicant's APA, as modified, discloses substantially the claimed invention except for the elastic body. West teaches the use of an elastic body (10) incorporated to a circuit board (12), thus reducing strain and wearing of the circuit board. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the circuit board of Kuo with an elastic body on the circuit board, as taught by West, to reduce strain and wearing of the circuit board.

West discloses the elastic body being a spring / made of rubber.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Benson et al. (US 5,078,615) and Freeman et al. (US 3,348,116) disclose movable connectors. Malone (US 6,454,587) discloses the use of sectional bolts and elastic bodies to reduce connection strain.

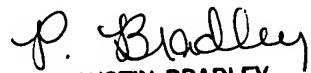
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felix O. Figueroa whose telephone number is (571) 272-2003. The examiner can normally be reached on Mon.-Fri., 10:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 Ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ffr



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